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The Children's Health Plan in Newfoundland¹

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THE institution of the Children's Health Plan was not as unusual in Newfoundland as it might have been considered to be in any other province of Canada. For many years, the Newfoundland Department of Health had been deeply involved in the operation of hospitals, and in the provision of medical care both in and out of hospital. Fifty years ago or more, physicians in practice had received remuneration from the Central Government for medical care to indigents.

The Cottage Hospital Plan, inaugurated in 1935 provided, under government sponsorship, an almost complete system of prepaid medical care and hospitalization. Similar arrangements had also been made by government subsidized organizations (International Grenfell Association and Notre Dame Bay Memorial Hospital Association). Over the years these various plans had been expanded to include over 45% of the total population of the province, covering all of the more isolated as well as certain other areas. Also, for many years the great majority of medical practitioners in Newfoundland enjoyed (admittedly a loose use of this word) some type of financial relationship with the Government through the Department of Health. In spite of this, I believe it is fair to say that there was, generally speaking, a good relationship between the Health Department and the physicians.

Introduction of the plan

It was with this background that in December of 1955, the Premier announced the inauguration of the Children's Health Plan. The necessary legislation was passed in May, 1956 and covered a complete plan for the medical care of children under sixteen years of age, to be introduced in stages

¹Presented at the fiftieth annual meeting of the Canadian Public Health Association, Halifax, N.S., May 31-June 2, 1960.

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which covered all aspects of medical care for children under sixteen years of age and up to the sixteenth birthday.

The various stages covered:

- Hospitalization
- Out-patient diagnostic services
- Medical care in hospital
- Dental and optical care
- Office and domiciliary visits.

In Newfoundland, children under sixteen years of age represent over 40% of the total population, a figure considerably higher than in Canada as a whole or in any of the other provinces.

The first stages of the Plan became operative on January 1, 1957. This covered hospitalization at ward level for all children under sixteen, and radiological and laboratory diagnostic services for out-patients as well as for in-patients. The benefits covered by this phase of the Plan were practically identical with those later covered for the entire population as of July 1, 1958 under Federal-Provincial Hospital Insurance.

Financial agreement

There had been some increased activity in negotiations between the Newfoundland Medical Association and the Department of Health during 1956 but this became much more active during the latter part of 1957. Representatives of the Canadian Medical Association were present for some of the meetings which were, by and large, carried out in a spirit of co-operation.

The two main purposes of the negotiations were: (a) To ensure that the increased demands for services would not lower the standards of hospital and professional care for children. The provincial association went on record as agreeing to the Plan in principle but included a note of caution regarding the possible results with relation to standards of care. Also stressed was the existing shortage of hospital beds for all age groups. (b) To establish a basis of payment for professional services rendered to children under the second stage of the Plan to come into operation on February 1, 1958.

The most important points covered in the financial agreement were as follows: payments for the first thirty days were to be made at 80% of the 1956 fee schedule of the Newfoundland Medical Association; payments for the next thirty days were to be made at 40% of the fee schedule; payments for the care of premature babies were to be 50% of the two preceding rates; no payments were to be made after the first sixty days of hospitalization of any child; in long term or complicated cases, the Minister could allow payments for procedures or operations.

Functioning of the plan

From the outset it was obvious that the remuneration of paediatricians would provide a problem because there seemed to be no doubt that with a limited number of such specialists available, their total remuneration under this Plan might well reach unacceptable heights. Because of this, a special clause was inserted in the letter of contract allowing for further review of this aspect after six months of operation of the second phase of the plan. This

clause proved to be the most contentious, and was the subject of frequent meetings.

By June, 1958, it was apparent that the Department's fears were being realized and negotiations were reopened under the clause allowing for a review of the earnings of paediatricians under the Plan. After further negotiations it was agreed that a contract year should start on September 1, 1958 and that when the earnings of any paediatrician from the Plan reached a set figure, he would from that point until the end of the contract year receive twenty-five (25%) of the agreed fees. On September 1, 1959, another contract year would commence under the same arrangement.

The profession felt that this could result in a modification of the fee-for-service principle and involve a ceiling on remuneration, with a potential result not too far different from a salaried arrangement. The Health Department, for its part, expressed the belief that the original terms would result in figures of remuneration far in excess of hospital earnings of paediatricians prior to the institution of the Plan.

Since the Summer of 1959 there has been no major difficulty in the operation of the Plan and, as far as I am aware, it is being well accepted by the profession.

Results and effects

The province was under-hospitalized at the outset, with a bed ratio of less than 4 per 1000 of population. The hospitals immediately felt the impact of increased demands for beds for children. Unfortunately, few comparable statistics for prior years were available, but it was obvious in some hospitals that space previously occupied by adults was now being given to children and in early 1958, admissions for certain types of operative procedures showed a sharp rise.

For example, the total of tonsillectomies performed in the first half of 1958 was over double the comparable figure for the first half of 1957. There was also a sharp and substantial increase (well over 50%) both in total separations and in total hospital days for children under sixteen in the first half of 1958 as compared with the same period in 1957.

With the advent of Federal-Provincial Hospital Insurance there was a swing back to adult occupancy and the total number of hospital days for the under sixteen group was practically identical in the last half of 1958 with what it had been in the same period of 1957. It should be noted that operative rates per population unit for similar age groups do not approach the few comparable figures available from other provinces.

The Health Department has, of course, made no attempt to control admissions but since July 1, 1958, has requested the same type of information on hospital admissions as is generally sought under the Federal-Provincial Hospital Plans. About one-third of all hospital days (excluding newborns), are still from patients in the under sixteen group.

One definite defect of the Plan, and in my opinion, this is common to many of the other Plans now in operation—is the anomalous position of giving a bonus to the patient or parent for treatment as an in-patient rather than as an out-patient.

What might be regarded as another anomaly is that not all physicians are being remunerated on a fee-for-service basis. Care given to patients in the Isolation Hospital is excluded as well as that in the areas covered by the Cottage Hospital Medical Care Plan. An attempt has been made to assign a proportion of the total remuneration attributable to hospital services for under sixteens, to physicians working under this second Plan. No definitely accurate figures are available, but it would appear that there is not much difference between the present figures and what would have been paid under a fee-for-service system. It should be stressed that this conclusion cannot be substantiated by exact figures but is believed to be a reasonable appraisal of this particular aspect of the Plan.

Costs

Of the total amount paid on a fee basis, the percentages received by the various groups were roughly as follows: general surgeons, 24%; paediatricians, 26%; ear, eye, nose and throat specialists, 15%; general practitioners, 15%; orthopaedic surgeons, 8%; anaesthetists, 7%; other specialists, 5%; total 100%. It is noteworthy that while general practitioners received only 15% of the total, there was one area where their remuneration reached about 50% of the total paid in that particular area.

I have been asked "What good has all this done?" Frankly, it is too early to judge, but it has been shown that it is possible to give one segment of medical care to one group of the population on a basis apparently acceptable to a high proportion of all the parties involved, and to do so under a department of government. Obviously, many children who needed care and who were not getting it before, are now receiving it. The statistics available will, in future, give a wealth of information of great public health significance.

SOMMAIRE

Le plan de santé pour les enfants de Terre-Neuve avait été préparé par le Ministère de la Santé déjà profondément engagé dans les soins médicaux et l'hospitalisation dans cette province. Les moins de 16 ans constituaient une proportion de la population bien supérieure à celle des autres provinces.

Le plan fut inauguré vers la fin de 1955 et il était entendu qu'on procéderait par étapes de façon à y inclure éventuellement tous genres de soins médicaux pour les enfants de moins de 16 ans, comprenant les visites à domicile et au bureau du médecin de même que les soins d'optique et dentaires.

Le premier janvier 1957 le plan comprenait le coût de l'hospitalisation de même que les examens radiologiques et de laboratoire pour les patients externes; à partir du premier février 1958 le plan s'étendait au paiement des frais médicaux et chirurgicaux des malades hospitalisés.

Le plan s'est avéré un succès, mais il fut entravé par le manque de lits d'hôpitaux. Il fut nécessaire d'accepter une échelle variable d'honoraires pour les pédiatres. (Trad.: Dr J. E. Sylvestre)

Paralytic Poliomyelitis in Canada, 1959

D. KUBRYK,¹ M.D., D.P.H.

DURING 1959, Canada experienced one of the highest paralytic poliomyelitis incidence rates ever recorded in this country. A total of 1,870 cases and 178 deaths was reported to the Epidemiology Division of the Department of National Health and Welfare. The attack rate of 10.7 per 100,000 population and the death rate of 1.0 were the highest since 1953, the peak year for paralytic poliomyelitis in Canada.

To June 1959 it was estimated that 45% of the Canadian population to age 40 had received three or more doses of poliomyelitis vaccine. The 1959 epidemic occurred mainly among the unvaccinated half of the population at risk. Seventy-two per cent of cases occurred among the unvaccinated. In the Province of Quebec, where 62% of the cases were reported, 77% of cases were unvaccinated and only 5% were fully vaccinated.

Geographic Distribution

All the provinces, except Manitoba, reported the highest paralytic poliomyelitis incidence rate since vaccination began in 1955 (Manitoba experienced an outbreak of paralytic poliomyelitis in 1958, with an attack rate of 12.3 per 100,000 population). Four of the provinces, Newfoundland, New Brunswick, Ontario, and Saskatchewan recorded the highest case rate since 1953, while the attack rate for Quebec was the highest since 1946 (Table 1). Newfoundland with a case rate of 31.0 and Quebec with 23.2 registered major epidemics, while all the other provinces, except Nova Scotia, Ontario, and Manitoba, were within the moderate epidemic rates, between 5.1 and 10.5 per 100,000 population. The 11 cases reported from the Northwest Territories in February and March 1959 were Eskimos and were widely scattered in the Eastern Arctic region. The unusual feature about these cases was the age distribution. Eight of them were between the ages of 20 and 44, two others were 19 years old and one 11 years of age. Four deaths occurred in this group for a case fatality rate of 36.3%.

Localized high concentrations of cases were reported from all the provinces where epidemic rates were registered. Clusters of cases were also reported from Ontario.

Age Distribution

Following the trend observed since poliomyelitis vaccination began, the highest age specific paralytic attack rates are to be found in the preschoolers, with a peak at age 3 (Table 2). The infants under one year of age accounted for

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TABLE 1—PARALYTIC POLIOMYELITIS: ATTACK RATES PER 100,000 POPULATION AND CASE FATALITY RATES (PER CENT) BY PROVINCE, CANADA, 1959, AND PREVIOUS SELECTED YEARS

Province	1959				Previous Year Exceeding the 1959 Attack Rate				
	CASES		DEATHS		Year	CASES		DEATHS	
	Num- ber	Attack Rates	Num- ber	Fatal- ity Rates		Num- ber	Attack Rates	Num- ber	Fatal- ity Rates
Newfoundland	139	31.0	12	8.6	1953	162	42.3	11	6.8
Prince Edward Island	7	6.9	1	14.3	1955	11	11.0	—	—
Nova Scotia	8	1.1	—	—	1956	9	1.3	1	11.1
New Brunswick	62	10.5	6	9.7	1952	67	12.7	11	16.4
Quebec	1160	23.2	105	9.1	1946	1612*	44.4	115	7.1
Ontario	198	3.3	21	10.6	1953	985	19.9	124	12.6
Manitoba	26	2.9	2	7.7	1958	107	12.3	11	10.3
Saskatchewan	46	5.1	3	6.5	1953	357	41.5	72	20.2
Alberta	81	6.5	12	14.8	1955	125	11.5	4	3.2
British Columbia	132	8.4	12	9.1	1955	146	10.9	5	3.4
Yukon	—	—	—	—	—	—	—	—	—
Northwest Territories	11	52.4	4	36.4	1953	N/A	N/A	4	N/A
CANADA	1870	10.7	178	9.5	1953	3691†	26.7	373†	10.1†

Includes:

*Poliomyelitis all types. Breakdown for paralytic poliomyelitis not available.

†Excludes Alberta. Breakdown for paralytic poliomyelitis cases not available. Total for 1953 was 1,472 cases all types and 108 deaths.

90 cases, an attack rate of 20.0 per 100,000 and 9 deaths, a case fatality rate of 10%, the highest noted among children's age groups. The paralytic attack rate for the 5-9 age group was 25.7. The high attack rate was mainly due to the high incidence rate among the 5- and 6-year-olds. These children, although included in the school age group, have an attack rate of the same magnitude as the preschoolers, suggesting that they are less vaccinated than older children attending school. It is interesting to note the similarity between the attack rates in the age groups 10-19 and 20-29. It may be assumed that the protection conferred by the vaccine in the well-immunized 10-19 age groups equals the natural immunity to be found in the 20-29 age group.

The case fatality rate increased with advanced age, the lowest being found among the 1-4 age group and the highest in the 40-and-over age group. This middle age group accounted for 54 cases and 16 deaths, a case fatality rate of 30%. In the adult age group, 20 and over, 22% of the total cases were recorded and 46% of the total number of deaths.

The age group distribution in Newfoundland, Quebec and the rest of Canada was quite different (Figure 1). The remaining eight provinces had a fairly similar age group distribution comparable to the one already noted in 1957 and 1958, with a high concentration of cases in the preschool children. There were 39.1% of cases in the under 5 (41.9% in 1958) while in the better vaccinated school age groups, 5-9 accounted for 20.1% (17.4% in 1958) and from 10-19 for 7.9% (9.5% in 1958) of the total. The over 20 age group accounted for 31.7% (31.6% in 1958).

Newfoundland presented a different picture with an age distribution reminiscent of the infantile paralysis epidemics. Almost 85% of cases occurred

TABLE 2—PARALYTIC POLIOMYELITIS: AGE-SPECIFIC ATTACK RATES, PERCENTAGE DISTRIBUTION AND CASE FATALITY RATES, CANADA 1959

Ages	Cases	Rate per 100,000 Population	Percentage Distribution	Deaths	Percentage Distribution	Case Fatality Rates (per cent)
Under 1	90	20.0	4.8	9	5.1	10.0
1	142	31.8	7.6	8	4.5	5.6
2	155	35.3	8.3	6	3.4	3.9
3	153	35.6	8.2	8	4.5	5.2
4	147	34.7	7.9	4	2.2	2.7
0-4	687	31.4	36.7	35	19.7	5.1
5	143	34.5	7.6	12	6.7	8.4
6	118	29.2	6.3	8	4.5	6.8
7	87	22.1	4.7	7	3.9	8.0
8	72	18.8	3.9	5	2.8	6.9
9	85	22.9	4.5	5	2.8	5.9
5-9	505	25.7	27.0	37	20.8	7.3
10-14	155	9.3	8.3	12	6.7	7.7
15-19	105	8.0	5.6	12	6.7	11.4
5-19	765	15.5	40.9	61	34.3	8.0
20-24	113	9.4	6.0	18	10.1	15.9
25-29	116	9.5	6.2	22	12.4	19.0
30-34	76	6.0	4.1	16	9.0	21.0
35-39	52	4.3	2.8	10	5.6	19.2
20-39	357	7.3	19.1	66	37.1	18.5
40-44	24	2.2	1.3	9	5.1	37.5
45-49	14	1.4	0.7	4	2.2	28.6
50-54	11	1.4	0.6	1	0.6	9.1
40-54	49	1.7	2.6	14	7.9	28.6
55+	5	0.2	0.3	2	1.1	40.0
20+	411	4.0	22.0	82	46.1	19.9
notknown	7	—	0.4	—	—	—
All ages	1870	10.7	100.0	178	100.0	9.5

in the 0-9 age group with the "under 5" accounting for 66.2% while adults comprised only 5% of the cases reported. In Quebec, the highest concentration of cases (48.7%) was found in the school age group 5-19 with the overall age group distribution being similar to that seen in the prevaccination era.

Sex Distribution

The total paralytic attack rate in males exceeded that in females, 11.6 against 9.3 per 100,000 population. The percentage distribution of cases by sex was 56% for males and 44% for females. This excess of male cases over female cases is apparent at all ages, except for the age group 20-34, where the female age-specific attack rates exceed the male attack rates (Figure 2).

Marital Status

The excess of female paralytic attack rates over male rates in the young adult age groups is due to the higher incidence of cases among young married

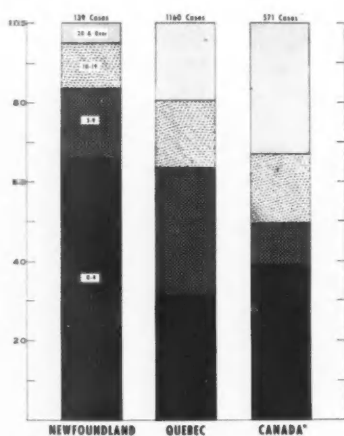


FIG. 1—PARALYTIC POLIOMYELITIS. PERCENTAGE DISTRIBUTION BY AGE GROUPS, NEWFOUNDLAND, QUEBEC AND REST OF CANADA, 1959.

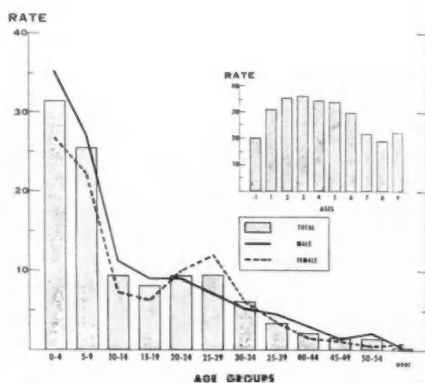


FIG. 2—PARALYTIC POLIOMYELITIS, CANADA 1959—ATTACK RATES PER 100,000 POPULATION BY AGE GROUP AND SEX.

females. An analysis by age, sex and marital status was made of the adult paralytic poliomyelitis cases in the 20-39 age groups reported in 1959 by Quebec. The attack rates were significantly higher in the female age group 20-34, especially in the age group 25-29 where the age-specific attack rate was more than double that in the male (Table 3). Among the adult female cases, the paralytic rates for the married females were excessively higher than those for the single females in all groups from 20-39. In the age group 20-24 there were 26 cases (a rate of 31.4 per 100,000) among married females in

TABLE 3—PARALYTIC POLIOMYELITIS: QUEBEC, 1959—ADULT CASES BY SEX AND SPECIFIED AGE GROUPS

Age Group	MALES		FEMALES		MALES AND FEMALES	
	No. of cases	Rate/100,000	No. of cases	Rate/100,000	No. of cases	Rate/100,000
20-24	28	15.2	37	19.8	65	17.5
25-29	23	12.6	48	26.3	71	19.4
30-34	17	9.4	25	13.5	42	11.4
35-39	17	10.3	11	6.5	28	8.3
TOTAL	85	11.9	121	16.7	206	14.3

contrast with 11 cases (rate 10.5) among single females. In the age group 25-29 there were 48 cases among married females (rate 35.6) and no cases among single females. In the age group 30-34 there were 22 cases (rate 14.5) among married females in contrast with 3 (rate 9.5) among single females. In the age group 35-39 there were 10 cases (rate 7.1) among married females against 1 (rate 3.8) among single females. For the total adult female group there were 106 cases reported among married women aged 20-39, an attack rate of 20.8, while among single women there were only 15 cases reported, an attack rate of 7.2 per 100,000.

The male adult group presents a different picture. The 20-39 age-specific attack rate for single males is higher than that for the married males, 14.2 (39 cases) against 10.5 (46 cases), although in the 20-24 and 35-39 age groups the attack rates for the married males are significantly higher, 22.3 (9 cases) and 11.4 (16 cases) against 13.2 (19 cases) and 4.1 (1 case) for single males. In the age groups 25-29 and 30-34 the single males attack rates prevail, 20.3 (14 cases) and 13.5 (5 cases) respectively, against 7.9 (9 cases) and 8.3 (12 cases) for married males. In view of the variable rates in the four age groups it is difficult to draw conclusions.

Among the 167 cases in married persons reported in Quebec, information on the presence of children in the household was available in 156 cases. The married cases with children represent 96.2% of the total reported. There were 6 cases (3.8%) where there were no children in the household, 39 cases (25%) with one child, 43 (27.6%) with 2 children, 35 (22.4%) with 3 children, 16 (10.3%) with 4 children, and 17 (10.9%) with 5 children or more.

Pregnancy

Twenty cases of paralytic poliomyelitis in pregnant women were reported in Quebec during an assessment carried out three or more months after onset and covering about 90% of the total number of cases. The 20 pregnant women were all within the ages 20-34. Five (rate 11.3) were in the age group 20-24, 13 (rate 27.9) were 25-29, and 2 (6.1) were in the age group 30-34. Of the non-pregnant women 32 cases (rate 22.4) were in the age group 20-24, 35 (rate 25.7) were 25-29, and 23 cases (15.1) in the age group 30-34. The rate per 100,000 for pregnant women was lower than that for non-pregnant women except in the age group 25-29 where the attack rate for pregnant women was slightly higher. Children were present in all but one of the households where pregnant paralytic cases occurred.

The trimester of pregnancy at onset was as follows: 5 cases occurred in the first trimester, 6 in the second and 9 in the third. The bulbar rate in the pregnant group was 45%, being about the same as the bulbar rate (44%) in the 20-and-over age group. The case fatality rate in the pregnant cases was 15% against 15.5% in the non-pregnant women in the 20-34 age group. The three deaths reported in the pregnant group occurred in women in the eighth, fifth and third month of pregnancy. Among the 17 surviving pregnant patients, 5 (31%) made a complete recovery while 12 (70%) were still paralysed three months or more after onset. The total "still paralysed" rate for all ages was 40%.

Information on the outcome of pregnancy was available in 16 cases. Twelve normal babies were delivered (one *in extremis* by caesarean section), two babies died soon after delivery, one of which was a six-month premature. There was one abortion and one stillbirth.

Two other pregnant paralytic poliomyelitis cases were reported, a 26-year-old from Alberta and a 27-year-old from British Columbia. Both died. One was five months pregnant and the other nine months. The latter was delivered *in extremis* of a normal child.

None of the five pregnant women that died was fully vaccinated. One had one dose of vaccine given the day before onset, another had also one dose shortly before onset while two others had two doses.

Vaccination Status

Among the 1,698 cases where vaccination status and age were reported, 72% were unvaccinated and 11.2% were triply vaccinated (Table 4). As expected, the largest percentage of triply vaccinated cases is to be found in the

TABLE 4—PARALYTIC POLIOMYELITIS: CANADA, 1959. CASES AND DEATHS BY AGE GROUP AND VACCINATION STATUS

AGE GROUP	0		1		2		3+		Not known		TOTAL	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
0-4	399	25	77	2	67	4	72	—	72	4	687	35
5-9	339	27	43	4	25	1	77	4	21	1	505	37
10-14	100	5	9	1	10	1	23	2	13	3	155	12
15-19	80	9	3	1	5	1	9	—	8	1	105	12
20+	304	62	30	5	16	1	10	2	51	12	411	82
Not known	1	—	—	—	1	—	2	—	3	—	7	—
TOTAL	1223	128	162	13	124	8	193	8	168	21	1870	178
Percent doses*†	72.0	81.5	9.5	8.3	7.2	5.1	11.2	5.1	—	—	100.	100.

*Excluding cases with unknown age or vaccination status.

†Excluding 21 deaths with unknown vaccination status.

well vaccinated school age groups, followed by preschoolers, while in the adult age groups only 2.8% were fully vaccinated (Figure 3). Eight deaths occurred among individuals triply vaccinated (5.1%) and 81.5% of those who died were not vaccinated (Table 4).

In the vaccinated group, 75 cases (27%) received the last inoculation within thirty days of onset. There was not sufficient information to correlate the site of vaccination with the site of paralysis. In Quebec, among the 62 cases

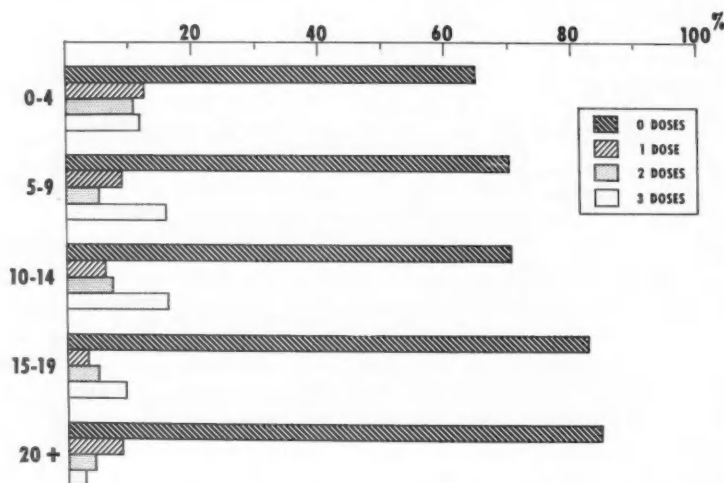


FIG. 3—PARALYTIC POLIOMYELITIS, CANADA, 1959—PERCENTAGE DISTRIBUTION OF CASES BY AGE GROUP AND VACCINATION STATUS.

vaccinated within 30 days of onset, including 34 vaccinated within a week, there were only 4 cases where the upper limbs were affected.

Among the 114 triply vaccinated cases where the interval between the last inoculation and onset of illness was known, 3 occurred within 30 days of the last inoculation, 13 within 1-5 months, 17 within 6-11 months, 67 within 1-2 years and 14 within 3-4 years.

Type of Paralysis

The total bulbar and bulbo-spinal rate was 37.9% (Table 5) increasing with age from 30% in preschoolers to 52.3% among adults. The vaccination status did not appear to influence the type of paralysis (Table 6).

Site of Paralysis

Of the 1,160 paralytic poliomyelitis cases reported in Quebec 4.7% involved one upper limb, 0.6% both upper limbs, 23.4% one lower limb, 21% both lower limbs, 18% upper and lower limbs, 1.2% spine or back, the entire body 1.6%, and 30% were other including bulbar and respiratory. Of these cases 44% were affected in the lower limbs while in only 5.3% was there a localization in the upper limbs.

TABLE 5—PARALYTIC POLIOMYELITIS: CANADA, 1959—CASES BY AGE GROUP AND TYPE OF PARALYSIS AND PERCENTAGE DISTRIBUTION BY AGE AND TYPE*

Age Group	Bulbar and Bulbospinal	% Distr.	Spinal	% Distr.	N/K	Total
0-4	191	30.0	445	70.0	51	687
5-9	178	38.4	286	61.6	41	505
10-19	86	35.8	154	64.2	20	260
20+	192	52.3	175	47.7	44	411
N/K	—	—	—	—	7	7
TOTAL	647	37.9	1060	62.1	163	1870

*Excluding cases with age and type not known.

TABLE 6—PARALYTIC POLIOMYELITIS CANADA 1959—CASES BY PARALYSIS TYPE AND VACCINATION STATUS AND PERCENTAGE DISTRIBUTION BY VACCINATION*

Doses Vaccine	Bulbar and Bulbospinal	% Distri.	Spinal	% Distri.	N/K	Total
0	443	37.9	725	62.1	55	1223
1	51	33.8	100	66.2	11	162
2	41	38.0	67	62.0	16	124
3	69	41.1	99	58.9	25	193
N/K	43	—	69	—	56	168
TOTAL	647	37.9	1060	62.1	163	1870

*Excluding cases with type or vaccination status unknown.

Residual Disability

An assessment was made of 1,013 cases, that is 86.5% of the total number of paralytic poliomyelitis cases reported in Quebec, three or more months after onset. Of these, 33% made a complete recovery, 17% had muscular weakness only, 40% were still paralyzed at the time of follow-up, and 10% were dead.

Multiple Cases

In Quebec, 108 paralytic poliomyelitis cases were reported as multiple cases in the same household, that is 9.3% of the total. Two cases occurred in 37 families, 3 cases in 3 families and in 25 instances, multiple cases were not matched.

Laboratory Identifications

Virus isolations and serological confirmation of diagnosis were reported in 748 cases of paralytic poliomyelitis (40%). Poliovirus Type 1 was by far the most prevalent, being identified in 642 cases (85%). Poliovirus Type 2 was isolated in 21 cases in Quebec and 1 in Ontario and Type 3 in 78 cases in Quebec, 2 in Nova Scotia, 2 in Ontario, 1 in Alberta and 1 in British Columbia.

Aseptic Meningitis

A total of 933 cases of aseptic meningitis was reported. Age group distribution was known in 804 cases (86%) and vaccination status in 647 cases (69%). Except for a high incidence in the 0-4 age group the aseptic meningitis age group distribution is similar to the paralytic poliomyelitis distribution (Table 7). As expected, the proportion of vaccinated among the aseptic meningitis cases is higher than among the paralytic cases.

Laboratory identifications were reported in 678 cases (72%). Poliovirus was identified in 71% of cases, Coxsackie in 21% and ECHO virus in 8%.

TABLE 7—ASEPTIC MENINGITIS: CANADA 1959—CASES BY AGE GROUP AND VACCINATION STATUS AND PER CENT DISTRIBUTION BY AGE AND VACCINATION*. COMPARABLE PERCENTAGES FOR PARALYTIC POLIOMYELITIS CASES

Age Group	Doses of Vaccine					Total	Per cent cases	Per cent paralytic poliomyelitis cases
	0	1	2	3	N/K			
0-4	88	23	12	15	50	188	23.4	36.7
5-9	105	24	15	48	37	229	28.5	27.0
10-14	51	13	6	28	20	118	14.7	8.3
15-19	49	7	5	5	19	85	10.6	5.6
20+	112	16	15	10	31	184	22.9	22.0
All ages	405	83	53	106	157	804	100.0	100.0
Per cent doses	62.6	12.8	8.2	16.4	—	100.0	—	—
Per cent doses paralytic polio	72.0	9.5	7.2	11.2	—	100.0	—	—

*Excluding cases with age and vaccination not known.

The distribution of poliovirus by type was similar to the paralytic poliomyelitis cases. Of poliovirus Type 1 there were 113 cases, Type 2, 10 cases (Quebec 9 and Ontario 1), Type 3, 37 cases (Quebec 34, Ontario 2, Manitoba 1), 322 cases were poliovirus unspecified. Of Coxsackie virus B5, 103 cases were reported in Quebec where outbreaks of Bornholm Disease were also reported. Coxsackie B5 isolations were also reported from Newfoundland, 3 cases, Nova Scotia, 7 cases, and Manitoba, 13 cases. Other types and unspecified totalled 16. ECHO Type 6 was reported from Manitoba, 30 cases, Nova Scotia, 2 cases, and Alberta, 1 case; Type 7 was reported in 1 case; Type 9 in Quebec, 11 cases, Manitoba, 1, Alberta 1; Type 14 in Nova Scotia, 4 cases; and Type 20 in 3 cases in Manitoba.

Estimated Effectiveness of Poliomyelitis Vaccine

In order to estimate the protection conferred by three or more doses of poliomyelitis vaccine, the estimated vaccination status of the Canadian population to June 1959 has been taken into account (Table 8). It is apparent

TABLE 8—ESTIMATED EFFECTIVENESS OF THREE OR MORE DOSES OF POLIOMYELITIS VACCINE, CANADA, 1959

Age Group	Population by Vaccine Dose		Unvaccinated		Vaccinated Cases		Percentage Estimated Effectiveness†
	0	3+	Cases	Rates/100,000	Observed	Expected*	
0-4	700,000	1,000,000	399	57.0	72	570	87.4
5-19	500,000	3,600,000	519	103.8	109	3,736	97.1
20-39	4,000,000	500,000	304	7.6	10	38	73.7
TOTAL	5,200,000	5,100,000‡	1,222	24.4	191	4,344	95.6

*Number of cases expected if unvaccinated rates prevailed.

†100% - (observed cases × 100)/expected cases.

‡Estimated population vaccinated to June 1959.

that the degree of protection is directly related to the number of persons vaccinated in a specific age group. In the well-vaccinated school children group the per cent estimated effectiveness of the vaccine is higher than in the less vaccinated preschool and adult age groups. It is felt that the age group specific per cent estimated effectiveness is more realistic than the total estimated effectiveness.

Poliomyelitis Vaccination in Canada

From 1955 to June 1960, a cumulative total of 32,150,000 cc. of poliomyelitis vaccine was distributed in Canada through the provincial and local health departments. This vaccine was purchased under the National Health Grants, the cost being shared by the federal and provincial departments of health. This total does not include the vaccine distributed through commercial channels.

It is estimated that to June 1960, 69% of the Canadian people in the age group 0-39 had received three or more doses of vaccine (Table 9).

TABLE 9—ESTIMATED NUMBER OF PERSONS VACCINATED AGAINST POLIOMYELITIS IN CANADA TO JUNE 1960

Age Groups	Population	Vaccinated with 3 or more doses
0-4	2,250,000	1,700,000 (75%)
5-19	5,050,000	4,600,000 (90%)
20-39	5,100,000	2,300,000 (45%)
0-39	12,400,000	8,600,000 (69%)

CONCLUSIONS

The 1959 upsurge of paralytic poliomyelitis in Canada accounted for 1,870 cases, an attack rate of 10.7 per 100,000 population and 178 deaths, a case fatality rate of 9.5%.

Although 45% of the Canadian population to age 40 was estimated to have been fully vaccinated by the summer of 1959, the incidence rate recorded was the highest since 1953.

With the exception of Manitoba where an outbreak of paralytic poliomyelitis was experienced in 1958 all the provinces reported the highest incidence rate since vaccination began in 1955. The highest case rates were registered in Newfoundland (31.0), Quebec (23.2), and New Brunswick (10.5). Localized concentrations and clusters of cases among the unvaccinated population were reported.

The highest age specific paralytic attack rates occurred in the ages 1 to 6 years old, from 29.2 to 35.6 per 100,000 population. The case fatality rates were highest in the "under 1" with 4.8% of cases accounting for 5% of deaths, and in the adults 20 and over, where 22% of cases accounted for 46% of the deaths.

Different patterns of age group distribution were noted in Newfoundland, where an "infantile paralysis" type of epidemic occurred; in Quebec where an age group distribution similar to the prevaccination era was reported; and in the rest of Canada with a high concentration of cases in the preschool children characteristic of the trend observed since 1957.

The total paralytic attack rate in males exceeded that in females. In the age group 20-34, however, the incidence rate of females exceeded that of males. This was due to the high incidence of cases among young married females.

In 96.2% of the married cases, children were present in the household. It may be assumed that the high case rate among young married females is due to the close contact with their children.

There was no evidence that the incidence of paralytic poliomyelitis is increased in pregnant women. In these cases, the presence of children again appears to be the most significant factor. There was no increase in the bulbar rate or mortality rate in the pregnant group. None of the pregnant women that died was fully vaccinated.

Seventy-two per cent of the paralytic poliomyelitis cases were unvaccinated and 11.2% of cases occurred among the triply vaccinated. In the adult age groups, only 2.8% were fully vaccinated. Among the deaths, 5.1% were triply vaccinated (8 deaths) and 81.5% were unvaccinated. Eighty-one of the triply

vaccinated cases had their last inoculations one to four years before the onset of illness. The vaccination status did not appear to influence the type of paralysis.

Poliovirus Type 1 was by far the most prevalent in all the provinces. Localized outbreaks of Type 3 were reported in Quebec and also several Type 2 cases.

A total of 933 cases of aseptic meningitis was reported. The age group distribution was similar to the paralytic poliomyelitis cases.

The proportion of vaccinated cases was higher among the aseptic meningitis than in the paralytic group. The distribution of poliovirus by type was also similar to the paralytic poliomyelitis cases. Coxsackie B5 virus was prevalent in Quebec.

The estimated effectiveness of three or more doses of poliomyelitis vaccine for all ages from 0-39 was 95.6% but it was felt that the estimated effectiveness in each age group gave a truer picture of the protection conferred by the poliomyelitis vaccine.

It is evident that in spite of the high degree of individual protection conferred by the poliomyelitis vaccine, only universal immunization will prevent further outbreaks of paralytic poliomyelitis. The introduction of the quadruple vaccine should ensure an adequate protection of the preschool age group and the infants. A concentrated effort will be required to increase the acceptance rate among adults, especially those in close contact with children, and other reluctant groups.

The changes noted in the epidemiological patterns of poliomyelitis, from a widespread infection to localized outbreaks, and the absence of large scale epidemics, will tend to increase the susceptible population. In 1959, in Canada, the youngest case was seven weeks old and the oldest was 72 years. Both died. No one is too young or too old to be vaccinated.

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Taking Up the Slack¹

DOROTHY M. PERCY, R.N.²

THE hazards attendant upon accepting an invitation early in January to give a paper the last day of May are not inconsiderable. At first, of course, one comforts oneself with the reflection that this is not going to happen for several months anyway. Then there is a bit of a shock early in February when one is asked to send a title for this address to be given late in May, the reason being that the program has to be set up and sent off to the printers in ample time.

A title! Before one has formed any very clear idea as to what one is going to say! Well, why not? On a snowy, blowy February day in Ottawa the prospect of going "down to the sea again" in May has definite appeal. Surely one could not go too far wrong in selecting something with a nautical flavour. "Taking up the Slack" might have a certain appropriateness in the circumstances—and content can be filled in later.

One is, of course, so very apt to be tripped up by one's own peculiar brand of ignorance. Although it is a matter of record that some very good sailors in the Royal Canadian Navy hail from points far inland, this particular land-lubber, who does not know a spinnaker from a jib, or the difference between "tacking" and "running", might have been wise, in the interest of clarity and accuracy to have selected some such phrase as: "Trimming Sail".

This was brought home to me rather forcefully when our Departmental translation folk, whose uncanny skill in circumventing the oddities and obscurities of the English language I have long admired, confessed to complete bafflement concerning my title: "Taking up the Slack". What, exactly, did that mean? How would it go, *en français*? Incidentally, should it, perchance, be in the plural?

Well, "Taking up the Slack" (singular or plural), "Trimming Sail"—surely either conveys a thought which is more or less central in the mind of anyone engaged in public health these days—how to "trim our sails", not only in order to keep our craft right side up in choppy waters and with Prime Minister Macmillan's "winds of change" blowing erratically from several quarters, but also to accomplish this in such a way that the winds and the waves serve our purpose and our fortune.

R. P. Davis, writing about the last of the windjammers, has this to say:

"The sea makes up its mind quickly about a man. If he's prone to timidity he's broken . . . The operation of these vessels was much in the hands of the skipper . . . He had a time schedule and this depended on how many chances he was willing to take.

¹Presented at the fiftieth annual meeting of the Canadian Public Health Association, Halifax, N.S., May 31–June 2, 1960.

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But the chances were calculated; he knew the sea and his ship. The trick was sail reduction. In a light breeze he flew everything he had, but as the wind rose he began to reduce canvas first from the top yards and then from the bottom. The skipper's concern was to reduce just enough sail to allow him to chalk up the best speeds. Taking too much off meant a great loss in time: leaving up too much laundry led to an unmanageable ship."

My time is brief but with your indulgence I should like to carry my fanciful sailing analogy a bit further and suggest that in this trinity of ship, water and wind each of us can, if we will, catch a glimpse of the organization we serve, the community needs which are our *raison d'être* and at the same time sniff the winds of changing trends and emphases which are affecting our progress so markedly. We should be able to make, each of us in our own way, a sort of rough-and-ready application of some of these observations as we steer course through our own special kind of sea.

How then do we "trim sail" in order to accomplish the two things mentioned earlier—to keep our craft upright and on an even keel—and to increase efficiency of operation?

I have selected, arbitrarily, three areas out of a possible "many" for brief attention:

Setting priorities—In the face of increasing demands for service, staff shortages and staff instability, there is a phrase which, equates, perhaps, with "trimming sail". We talk about "setting priorities".

Now, curiously enough (or perhaps not so curiously since I think we are all in agreement that the public health nurse is the key figure in any public health program) it is her priorities, the public health nurse's priorities, with which we are chiefly concerned. And rightly so. Overall health needs are increasing more rapidly than available facilities. Meanwhile the public health nurse is having to spread her efforts ever more thinly. The pressure of routine demands, together with increased professional responsibilities, build up and frustrations are inevitable. While this is true, of course, for all workers in the health field, the public health nurse occupies, for obvious reasons, the most vulnerable spot.

And what are we doing about this? Are we really giving much more than lip service to this matter of priorities? We talk a lot about it, sometimes in the manner of those who say about sin that they are "against it" (only in this matter of priorities we are "all for it".) But are priorities really being set? Is the public health nurse being helped to set hers, or is the original program of the organization still being carried, more or less, but in such dilution as to be in danger of ineffectiveness?

If priorities are being set, who is setting them and how are they being set? These are important questions. Traditionally in some of these areas the doctor delegates the nurse takes over. Surely in the interest of efficient "sail trimming", this should be the subject of conference between colleagues deciding together on what will be retained in the program; what has to go; and who will do what and in what order.

My own observation leads me to suspect that a good deal of the restlessness and turnover among public health nursing staff lies just here, and not so much in the area to which attention is most frequently drawn, namely, salaries basically important though these are in the total picture. Some public health

nurses are rebelling against being caught in the squeeze, frustrated by their sheer inability due to mounting and diverse pressures to do the job which, by temperament, inclination and preparation, they are, by and large, superbly equipped to do.

Make no mistake about it. Our public health nurses are not expendable, although we sometimes act as though they were. They are our most precious, irreplaceable resource. Their time, their energy and their enthusiasm are quite literally priceless, and should not be frittered away on tasks largely related to things—tasks, many of which others can do more efficiently. Instead, as we "trim sail", we should see to it that what they have to offer should be directed towards people, to the further development of that person-to-person contact in which they excel, which experience has shown to be so important and yet for which, so often, in our present programs, they have far too little time.

We must be quite realistic here. It seems unlikely that we shall ever have many more public health nurses in relation to the growth of the job but if we are smart we can have more public health nursing service. This suggests serious consideration of the selective and careful use of other types of personnel, not as replacements for the public health nurse for she must retain her key position, but as extensions of her service.

This whole area of priorities and staff utilization points up the need not only for new staffing patterns but also for wider use of consultant service and in-service training in order to build additional skills into our good basic staff public health nurses.

Sometimes in our preoccupation with our problems I think we are inclined to make this whole matter of illness and health sound much more complicated than it need be—if we were properly organized and knew how to use what we have more intelligently. The fundamental needs of people in our communities have not changed very much, although the perception of these needs and how best they can be met has changed considerably in recent years.

The needs themselves can be stated simply: care when we are ill; prevention of disease and usable health information. These touch on our topic of "trimming sail" because undoubtedly public health nurses are going to be involved more meaningfully in the care of illness at some stage, especially to the degree that efficient referral systems between hospital and community are set up and, as well, with the development across the country of pilot schemes of alternatives to hospital care. The implied corollary here, of course, is a much closer working relationship between hospital and public health agency.

Reference to the need of people in the community for "usable health information" brings me to my second point in "trimming sail". One of the biggest problems is to bring the benefits of what is already known to people who need them, in terms they will understand and accept. This the public health nurse should be able to do more easily than some others in the health team because of her close identification with individuals and families.

But there is a curious paradox here. On the one hand we have facts to burn, on the other a hard core of those in the community who do not respond to the classical approaches to health education.

"In an age marked in so many ways by apathy rather than hostility, it may be more immediately important to put questions into the minds of our contemporaries than to try to put answers there. Indeed it is useless to distribute answers to people who are not asking questions." This was said by someone about another matter entirely but it may not be without relevance in the approach of the public health nurse to health education. In "trimming sail" should we not see to it that our nurses have, in addition to facts, the opportunity to learn the skills involved in getting people to ask the kind of questions for which we have the answers?

In the third place it would seem we might be able to "trim sail" with advantage to our craft in the area of research and work studies. Leadership in public health includes, in addition to bold, imaginative thinking, a willingness to analyse needs, assess resources, take action in the light of both of these, and then follow up with evaluation of the action. The foregoing does not necessarily imply the application of full-blown research techniques and methodology to every problem. It does mean, I think, development of an attitude of research-mindedness on the part of every member of the ship—from captain through first mate to deck hand.

"The report of a good work study is like a sailing chart. It marks the distances and channels, the hazards, the buoys and the harbour. The reliance to be placed on the chart will vary according to who made it. But no matter how large a chart you own, one thing is certain: you must still steer your own ship." In other words, a work study at best, can be only a navigational aid.

Such research-mindedness should help us as we try to appreciate the trend in change, rather than what seems to be immediately happening. It should help us assess the significance of the newer emphases, such things as the emotional aspects of illness, the multiple problems associated with our aging population, the borderline between health and illness—where is it, and how much of it are we, as public health workers, responsible for?—various facets of rehabilitation and mental health, these things which are emerging into view like rocks uncovered by the receding tide. Best of all, perhaps, this habit of applying simple research yardsticks to all we do may help us in what might be our biggest and most important remaining task—the co-ordination at all levels of our fragmented services.

These then are a few random and, I am afraid, superficial, although I hope, not impertinent observations concerning this urgent matter of "trimming sail".

And now, what of the weather forecast, clear or foggy? No one can say, for sure. We do know, I think that although the focus of public health may alter, the basic tasks will not. There is still sailing to be done, there are voyages to be made, and a harbour to be reached whatever the weather.

It is probably safe to say that the kind of voyage we shall experience will be largely determined by our willingness to examine our traditional ways, to evaluate their adequacy in the face of new demands and, as the skipper in his wisdom sees fit to order from time to time to "trim sail". And if we have a good sound ship and our skipper is experienced we need not worry too much about the forecast. After all, the wind and the waves are on the side of the able navigator.

Community Psychiatric Services in a Rural Area¹

STANLEY RANDS,² M.A.

THE purpose of this paper is to suggest the main considerations which must guide the provision of psychiatric services in the immediate future, and to describe a particular program which seeks to adapt such services to the specific needs of a sparsely populated rural area. The assumption is made that the basic principles determining an effective psychiatric service are the same in any situation and that the desirable plan for a rural area involves only modifications in the application of these principles.

The background to any discussion of psychiatric services today must be the mental hospital as we have known it over the past several decades. The first step in the quiet revolution that has been taking place during the past few years in attitudes and philosophy of mental health care was the recognition of the deficiencies of the large, traditional, mental hospital. The awareness of these deficiencies has become general throughout the western world. Millions of words have been spoken and written to describe these deficiencies. Not only have professional people in the health field come to almost unanimous agreement that the monolithic and usually isolated mental institution is no longer appropriate, but large sections of the public have begun to demand that such institutions be replaced by a more humane program better able to apply modern psychiatric knowledge.

Despite widespread publicity which has been given to the weaknesses of the large mental hospital, nowhere yet has a comprehensive program been implemented to provide the desirable elements that the large hospitals lack and at the same time avoid the disadvantages for which they have been condemned. Only in the past year or two has the mass of criticism of the large mental hospital begun to clarify into a set of principles which can guide the development of new services along desirable lines.

The Saskatchewan Plan

One of the first serious criticisms of the large mental hospital to receive widespread notice was contained in a report of the WHO Expert Committee on Mental Health published in September, 1953. This report recommended that future mental hospitals be as small as 250 to 400 beds, built in separate cottage units for 25 to 30 patients, that the patients eat, sleep and work in groups up to ten in number; that a maximum of privacy be provided and that the mental hospital be in close proximity to a general hospital. Guided in

¹Presented at the fiftieth annual meeting of the Canadian Public Health Association, Halifax, N.S., May 31-June 2, 1960.

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general terms by these principles, the Saskatchewan Psychiatric Services Branch developed a detailed proposal which came to be known as the Saskatchewan Plan. It envisaged dividing the province, except for the areas immediately surrounding the two existing mental hospitals, into regions with a population of about 75,000 each, and building in each region a small mental hospital to provide all psychiatric services required in the region. The hospitals were to consist of treatment cottages each housing 30 patients, subdivided into groups of ten.

The plan was presented at the American Psychiatric Association Mental Hospital Institute at Denver, Colorado in October 1956 and the principles embodied in it received general approval. The proposal was studied by the Committee on Mental Health Services of the Canadian Mental Health Association and the interim report of the Committee, issued in 1957, favoured hospitals of about 300 beds.

Two major considerations governed the further development of the Saskatchewan proposal. The first was that the physical accommodation must avoid the harmful internal features of the large mental hospital. These results are expected to follow from a reduction in size, from the type of building, and from the arrangement of living quarters so that the patient may enjoy privacy when he desires it and also participate in groups of varying sizes. The cottage for 30 patients avoids the regimented mass life which is inevitable for patients in large institutions. The division of each cottage into three parts, each for a group of ten patients, makes it possible for the patient to live in conditions somewhat approaching those of normal family living. Adjacent to the private bedrooms of the ten patients in a group is a sitting room similar to that of a home and equipped for quieter pastimes and activities. Central to the three areas within a cottage is a lounge in which a variety of recreational and occupational activities may be carried on either individually or in groups. These arrangements are expected to provide psychological and social conditions completely different from those of the large institution.

The second way in which the physical accommodation will differ radically from that of the large institution is in its location. Historically the large mental hospital developed as a means of removing the mentally ill from the community. It was therefore natural that it should be to a large extent separate from the community. In more sparsely populated areas, the very size of the mental hospital required that it be great distances from the majority of the population whom it was intended to serve. In Saskatchewan these distances are as great as 300 miles. The community mental hospital will be located in the center of the area served and its distance from all parts of the region will be within reasonable reach in terms of the roads and the travelling habits of the population. Of equal importance in location is the proximity of the proposed community hospitals to other medical facilities and, in particular, to general hospitals. The psychiatric center about to be built at Yorkton will be on the same grounds as a general hospital of equal size and will be physically integrated with it. The avoidance of duplication and the sharing of service facilities will be an economic advantage, but greater importance is attached to the different public attitude which is expected toward a mental hospital which is side-by-side with a general hospital and of equal quality to it. It is believed that no

amount of education of the public can do as much to reduce the stigma and fear associated with mental illness as day-to-day familiarity with an attractive mental hospital in their own community, a hospital which they see their neighbours and relatives entering and leaving as easily as they enter and leave a general hospital.

A new name—"Regional Psychiatric Center"

The physical facilities proposed for the new mental hospital will be drastically different from those of the traditional mental institution. Because buildings are tangible and because they are costly, considerable attention has been attracted to the buildings proposed in the new plan. It is most desirable that the attention devoted to the buildings should not obscure the fact that as well as in-patient care they provide a base for a comprehensive and flexible psychiatric program. For this reason it is proposed to call the buildings a regional psychiatric center rather than a mental hospital. There is likely to be a direct benefit in avoiding the term "mental hospital" because of the associations of stigma and custodial care which have become associated with it. It is hoped that the term "center" will suggest that the physical facility is indeed but a center from which services are provided to the entire community. This is in marked contrast to the institutional tradition by which those members of the community requiring care are "sent" to the institution and the institution is thought of as something apart from the community.

There are some objections raised to avoiding the name mental hospital. These are based on the feeling that it is better to put new meaning into the old term. When the intention is to develop a program which is completely different in many respects from the mental hospital as it is known both to the professional worker and to the public, there does seem to be good ground for using a different term in order that it may be easier for a new connotation and a new community attitude to develop. Despite the devoted efforts of mental hospital staffs, there is no doubt that judged by current standards the large mental hospital has been a failure. The enormous accumulations of chronic patients, the discouragement to the staffs of encountering so many obstacles to successful treatment, the consequent difficulty in obtaining or holding adequate staff—these factors have produced a vicious circle. The time has come when the impasse of the large mental hospital must be broken by a fresh start. There is much to be said for christening the fresh start with a new name, particularly when the new facility is intended to be the vehicle for a new philosophy.

A New Philosophy

The new philosophy is a simple one, although the task of carrying it into practice may prove to be enormous. The philosophy starts with a genuine respect for the individual who is mentally ill, and a recognition that he can best be helped by being treated in the community with as little interference with his normal living as is possible. This implies that psychiatric services should be so organized that existing psychiatric knowledge is fully available to help the patient. It implies also that every patient should be fully assessed on an out-patient basis, with a home visit if necessary, before the decision is

taken as to the kind of care needed, and that whenever possible, out-patient treatment is used, with the day-hospital and the night-hospital as further alternatives to full hospital care.

A second principle of the philosophy is that the hospital, when it is used, shall do the patient no harm. This principle requires that the patient shall only enter the hospital when it is beneficial to him and shall leave as soon as he reaches a stage where the help he requires can be provided at home or in the community. It implies further that the program shall be so arranged that it can provide the patient with the particular type of care that he needs.

Optimism as to the results of the regional psychiatric service are based in part on experience in other parts of the world. The Amsterdam Mental Health Service has attracted attention for a number of years because its emphasis on out-patient and home care has been associated with a relatively low rate of institutionalization. The integrated community and institutional services developed in several centers in Great Britain, and in particular by Dr. Duncan MacMillan at the Mapperley Hospital in Nottingham, have shown that hospital populations can be reduced when the hospital becomes part of a community-oriented service. The Worthing Experiment in southern England has shown that a great proportion of mental patients can be treated in the community rather than in hospital when community and home services are diligently developed.

Trial in the Swift Current Health Region

Similar experience is now available in our own province. A regional clinic service has been developed over the past two years in the Swift Current health region with a population of some 55,000 people. This service has been carried out by a team of only one psychiatrist and one psychiatric social worker. It has consisted of a full-time clinic in the major city of the region and monthly part-time clinics in the three other main centers. Home visiting has been extensively carried out and a relationship with the general practitioners has been developed so that practically all cases of mental illness are referred to the clinic before consideration is given to mental hospital committal. This service labours under the handicap of having no beds for psychiatric care within the region. When in-patient care is found to be necessary, the patient must be sent outside of the region either to a psychiatric ward 100 miles from the center of the region or to a mental hospital 200 miles distant. The serious disadvantage of this separation between in-patient and community services has been overcome to a considerable extent by the development of close working relationships between the clinic staff and the distant in-patient facilities. This relationship is established before the patient is admitted and is maintained while the patient is in hospital. When the patient returns to the community the continuing assistance of the clinic staff is available. This community service, in spite of having no psychiatric beds within the region, has affected the amount and the effectiveness of in-patient care. Because of the number of patients that can be carried on an out-patient basis, and because of the support which can be given to patients who are discharged to the region, admissions have steadily dropped, discharges have increased and re-admissions have decreased.

Complete integration between in-patient and out-patient care.

This experiment in the Swift Current region has pointed strongly to the conclusion that a similar service in a region with in-patient beds as part of the program could be considerably more effective. There is ground for expecting that the number of psychiatric beds required in a region in which such a service is provided may turn out to be much less than has usually been assumed necessary.

The location of the community psychiatric center in a city and within reach of the homes of all the patients is expected to reduce very greatly the degree of de-socialization which takes place when a patient is admitted to a large hospital at a distance from his home. It will be possible for the relatives to maintain a close relationship. The contact with the community will be maintained during the period of hospitalization. Visitors and volunteers from the neighbouring communities will take part in the life of the hospital. The patients themselves will be encouraged to take part in community activities outside of the hospital. There will be no break in the relationship between the patient and the psychiatric staff who visit him in his home before he comes into hospital. They will be the same staff who will care for him in the hospital and who will continue to support him after his return to the community. Rather than contribute to depersonalization, it is expected that such a program will contribute to the individual's maintenance of secure relationships with other persons.

This complete integration between in-patient and out-patient care is considered at least as important in the proposed program as the new type of hospital. The recent advances in psychiatric treatment require such integration. The use of tranquillizing drugs in mental hospitals, the elimination of physical restraints, the open-door trend, and the general replacement of the custodial attitude by an optimistic therapeutic approach—all these factors mean that intermittent short-term treatment is becoming more and more frequent. As a result, more and more patients need to alternate between clinic service and brief periods of hospital care. This trend points up the unsoundness of the widespread practice on this continent of developing mental health clinics separately from mental hospitals. In many areas clinics and institutions are under separate administrations. Even where they are under the same administration they tend to be kept quite separate, and psychiatric staffs have specialized either in out-patient work or in hospital work. It has now become clear that effective continuing therapy as well as respect for the patient as a person requires that the same professional team be responsible for the individual patient throughout the entire course of his illness. In the regional psychiatric program this will be made possible by each team of one psychiatrist and one psychiatric social worker spending part of each week at the hospital, part of it in their particular out-patient clinic and part of it visiting the homes of patients in their sector of the region.

New Legislation Needed

The full benefits of an integrated service can be expected only if patients find it easy to enter and to leave the in-patient facility. This will require changes in the legislation concerning hospitalization of the mentally ill. It is

hoped that the present committal procedures will be abolished and that it will be made possible for the great majority of patients to enter the mental hospital without more formality than is now required for admission to a general hospital and without incurring legal disabilities. Basically, the change required is that which has been made in the new British Mental Health Bill resulting from the studies of the Royal Commission on Mental Illness and Mental Deficiency. The crucial change required is to base admission procedures entirely on the condition of the patient, rather than on the hospital he enters. An arrangement by which entering and leaving a mental hospital is simple and informal can also be expected to contribute greatly to a more positive public attitude to mental illness.

Relationship with other health personnel and agencies

An aspect of the community psychiatric center which is of great potential significance is the relationship with other health personnel and agencies. Psychiatric hospitals have been remote not only from the populations they serve but also from other areas of service to which they should be closely related: the medical practitioner, the general hospital and the public health agency. Geographical isolation has been more responsible for this separateness than has administrative segmentation. The community psychiatric service will provide a situation in which psychiatry can relate itself to the other areas of health service in whatever way proves most helpful to each service and to the patient. The relationship with the general hospital will be as close as is found to be mutually beneficial; it may be complete integration with the programs differing only to the extent required by the different types of patient. The medical practitioner will have a psychiatric consultant readily available to him so that there will be no sharp break between the medical care to which the patient is accustomed, and the specialized care which may become necessary due to an emotional or mental problem. In the majority of cases the function of the specialized psychiatric staff will be purely consultative so that the management of the case will remain with the family doctor. When out-patient treatment is required, it will be carried out in close relationship with the general practitioner so that there will be continuity of contact between patient and doctor. When in-patient treatment is required, the practitioner will no longer be under pressure to defer treatment, as he often has been in the past, because the only way to obtain it was to send the patient to a distant institution by means of unpalatable committal procedures.

The relationship with the public health program remains to be worked out, but a fairly clear pattern has emerged in those health regions with a mental health clinic in or adjacent to the health region office. The psychiatric staff and the public health staff, when serving the same geographical region, have every opportunity to develop an effective liaison involving public health nurses and teacher-psychologist as well as the medical health officer. It has not been found that administrative separation need be a barrier to team-work between psychiatric and public health personnel when both are located in the community.

One of the concerns of public health personnel will be the development of a preventive program in mental health. Progress has been uneven and slow

and there is still much debate as to whether the knowledge is yet available to embark on a full-scale preventive program. This area of responsibility must undoubtedly be faced jointly by personnel in public health and in psychiatric services. A recent report of a WHO study committee stated that the first step in the formation of a comprehensive preventive service in mental health is the adequate organization of the psychiatric hospital and the services related to it. The regional psychiatric service promises a situation in which the treatment personnel can make a maximum contribution to those preventive measures which are their direct responsibility, namely early detection, early treatment, prevention of chronicity and prevention of relapse. The new situation should also provide a much better basis for co-operation between psychiatric and public health workers in developing a program of primary prevention.

SUMMARY

A new type of community psychiatric service to be implemented in a health region in Saskatchewan is described against the background of the inadequacies of large, remote mental hospitals. The philosophy of the new approach, and the anticipated benefits, are discussed.

The psychiatric center will provide all in-patient care required in the health region and will also be the base for a comprehensive psychiatric service throughout the region, including travelling clinic teams and home visiting. The in-patient facility will avoid the depersonalizing effects of the traditional mental hospital by cottage-style construction permitting the patients to live in small groups and to enjoy the privacy of individual rooms.

Advantages expected from locating the treatment center in the community and adjacent to the general hospital include closer relationships with private doctors, continuity of treatment for each patient, shorter periods of hospitalization and a decrease in the stigma attached to mental illness.

SOMMAIRE

Un nouveau type de service psychiatrique aux communautés qui sera inauguré dans un région de règlement sanitaire de Saskatchewan est décrit sur un fond des imperfections des grands hôpitaux psychiatriques éloignés. La philosophie de la nouvelle approche et les avantages attendus, sont discutés.

Le centre psychiatrique fournira tout soin pour les hospitalisés dans la région de règlement sanitaire, et sera aussi la base pour un compréhensif service psychiatrique dans toute la région, cicompris les équipes voyageuses cliniques et visites aux maisons. Le service pour les hospitalisés évitera les effets dépersonnalisants de l'hôpital psychiatrique traditionnel par construction chaumière qui permettra aux malades à vivre selon petits groupes et à jouir de la solitude de chambres individuelles.

Les avantages attendus de la localisation du centre sanitaire dans la communauté et prochain à l'hôpital général comprennent les rapports plus étroits avec les médecins à clientèle privée, continuité d'attention pour chaque malade, termes d'hospitalisation plus courts, et une diminution du stigmate attaché aux maladies psychopathiques.

The Construction and Operation of Open-Air Swimming Pools and Bathing Places¹

L. A. KAY²

THERE has been a tremendous boom in Manitoba in the development of bathing and swimming facilities for the general public. As a result, the original regulations under the Public Health Act are more or less outmoded as they were designed with standard swimming pools in mind of the type found at the Y.M.C.A.

In 1957 the Kinsmen Club at Stonewall, Manitoba, cleaned up an old swimming hole and gradually transformed this area into an attractive artificial lake with a view to providing a safe bathing and swimming area for the local children and their parents. Unfortunately, news of the project spread far and wide, and it was not long before people thronged to Stonewall in spite of a charge being assessed for the use of the pool. As might be expected, other individuals and organizations felt that this method of providing facilities for the public might be both beneficial and profitable, hence, in 1959, there were probably from fifteen to twenty-five open-air installations.

At the time that attention was being focused on these promotional ventures, the significance of government-owned-and-operated bathing beaches was suddenly realized; especially in regard to possible danger to the public safety, if not danger to the public health. Safety clauses were hastily added to the existing regulations and a committee was appointed to assess the problem throughout the province.

From a health standpoint, the main problem, of course, is that of drafting reasonable and practicable regulations to cover the design, construction and operation, not only of standard swimming pools, but also of the newly-developed modified pools and artificial lakes. Fundamentally, the modified pool is merely an artificial reservoir in the ground rather than a concrete tank. On a larger scale, it has the obvious drawback of a communal bath, i.e. after a period of time it can become dirty unless provision is made for the addition of fresh water and for continuous chlorination.

The artificial lake on the other hand, is generally created by the damming of a creek with the hope of having a shimmering expanse of water. Here, fresh water is constantly diluting and replenishing the main reservoir volume so that, taking this into account along with the extraordinary amount of water per bather, sanitary conditions can be expected to be fairly satisfactory.

¹Based on a paper presented to the Ninth Annual Institute for Sanitary Inspectors, Winnipeg, Manitoba.

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There are, of course, various in-between modifications of these installations, such as the artificial lake which may be filled in the spring and will gradually shrink away in the warm months of summer which has no available fresh water intake and no overflow to remove accumulating contaminants. Similarly, there may be the modified pool consisting of an abandoned gravel pit or oxbow without any positive method of conditioning or purifying the water. We should, however, be able to fit any project in to one of the following categories: (1) the natural bathing place, (2) the standard swimming pool, (3) the modified swimming pool, (4) the artificial lake, (5) the modified artificial lake, (6) the wading pool.

BASIC CONSIDERATIONS

Lacking any guidance from the experience of provincial, state, or federal authorities, it behooves us to take a good look at the possible dangers to the public health in any of these types of developments, and to set up basic standards for design and operation which would provide the public with reasonable safeguards without penalizing the promoters so heavily as to discourage the establishment of these recreational devices.

Dealing first with wading pools, it would seem obvious that here the crux of the situation is careful operation and supervision, after taking the primary step of obtaining the permission of the local medical officer. Regulations would not ensure that a wading pool would be safe, especially if supervision were lax, careless, or non-existent.

With the first of our categories, the natural bathing place, some comfort can be taken from the fact that while it is difficult or impracticable to chlorinate bathing waters there is generally either a movement of the water or extraordinary dilution, or both. It is therefore reasonable to apply the following less stringent bacterial standards as a yardstick.

Incidence	Coliform Organisms per 100 ml Classification	
	<i>Flowing Waters</i>	<i>Non-Flowing Waters</i>
0 to 100	Very Good	Good
100 to 500	Good	Fair
500 to 1500	Fair	Doubtful
1500 to 3000	Doubtful	Doubtful-Hazardous
3000 to 5000	Doubtful-Hazardous	Hazardous
5000 up	Hazardous	

Up to 10% of the sample results, if extreme, may be disregarded

With the *standard swimming pool*, the problem is more acute, but at least the basic principles of design, construction and operation may be set out in order so that the matter of checking is reasonably easy. Fundamentally, in this type of pool, we depend on continuous recirculation and reconditioning of the entire pool water once in eight hours, continuous chlorination of the incoming reconditioned water, and a continuous overflow of the surface scum-containing water to waste.

With this type of pool, there is little difficulty in reaching a strict standard of bacterial quality approximately equivalent to that of drinking water. When the operation is of the fill-and-draw type, there is, however, an obvious danger of the gradual building up of contaminants, a lessening of the effectiveness of chlorination as a bactericidal procedure, and an accumulation of mucous matter on the surface of the pool.

In regard to this type of pool, it is strongly suggested that:

- There should be an addition of at least ten per cent of the pool contents each twenty-four hour period.
- The entire pool contents should be drained if there is any indication of a build-up of contamination.
- A positive system of chlorination should be incorporated with the supply of make-up water.
- The bacterial content of the pool water should be watched very carefully.

With the *modified swimming pool*, a different problem exists in that the effectiveness of chlorination may be very greatly reduced because of the pervious nature of the pool bottom, and because of exposure to sunlight. It has been tentatively established, however, that the following procedures should ensure a reasonable degree of good sanitary operation:

- Sufficient fresh water intake to cause an overflow of at least five per cent of the pool volume in twenty-four hours.
- Positive chlorination of the make-up water—roughly 10 parts per million—to ensure meeting the required bacterial standard.
- Frequent testing of the pool waters (below the surface) to meet the following bacterial standard:

<i>Coliform Incidence</i>	<i>Classification</i>	<i>Provisos</i>
0 to 50 per 100 ml.	Good	Two out of ten samples may be higher
25 to 200 per 100 ml.	Fair	Two out of ten samples may be higher but not over 500 per 100 ml.
100 to 1000 per 100 ml.	Doubtful	Suggest immediate re-sampling

With careful supervision, hour-by-hour check of the installation and removal of debris, and the restriction of the bathing and swimming loads to approximately one-half those allowed for standard swimming pools, it may reasonably be expected that this type of installation can be operated in an innocuous manner.

With the artificial lake some of the sanitary dangers may be eliminated because of a superabundance of water in proportion to the number of bathers or swimmers using the installation. If there is not extraordinary dilution and a continual movement of the surface water in overflow it may be necessary to introduce some means of chlorination of the bathing and swimming areas up to depths of about 6 feet. It may also be necessary to introduce fresh water from wells or from secondary sources.

Some relaxation of the bacterial standards is reasonable, and the following are suggested.

Incidence	Coliform Organisms per 100 ml.	
	With positive overflow or extraordinary dilution	With minimal overflow, some dilution, some chlorination
0 to 50	Good	Good
25 to 200	Fair	Fair
100 to 500	Fair-Doubtful	Doubtful
400 to 1000	Doubtful	Doubtful

OTHER TYPES OF INSTALLATIONS

Some installations may be modifications of other types and could be quite difficult to classify. It would also be difficult to draw up a list of standards which could be fitted to every possible variation. In general, one might apply the major criteria of either the modified swimming pool or of the artificial lake, or both, against any in-between proposal or installation.

Regulations should be fairly general, flexible, and yet definite enough so there may be no misunderstanding between the inspector and the operator of any pool or bathing place which is open to the public.

As noted before, there will likely be a separate Act in regard to safety precautions. Our office has recommended that all installations be licensed, and, further, that operation be allowed only with the regular permission or a permit from the local health authority.

Manitoba is breaking new ground in the development of these unorthodox facilities for the use of the public, and therefore it should be kept in mind that as a result of the 1959 observations and tests, it may be necessary to vary the regulations from year to year until we find a reasonable basis for supervision of operation without too heavy a burden on either the Department or the individual operators. During the 1960 season a crew of four temporary staff student engineers worked on the preliminary inspection of these facilities in co-operation with the health unit and area sanitary inspectors.

SUMMARY

There is some conflict of opinion concerning the advisability of allowing the operation of public bathing premises, with water of marginal or even doubtful sanitary quality. Is it not preferable to provide supervised facilities with the added protection of life guards and adequate safety equipment rather than deplore the mounting toll exacted from the ranks of unwary swimmers in unpatrolled lakes and rivers?

It is estimated that on one warm summer week-end in July, 1960, there were over 50,000 paid admissions to various modified pools and artificial lakes in the vicinities of Greater Winnipeg and Portage la Prairie, admissions to bathing premises which did not exist four years previously.

There is a demand for more and better swimming pools and bathing places. Sound competition has forced the provision of more attractive amenities with the result that the standard of operation is improving steadily. A second and even more significant result is a resurgence of interest in standard swimming pools.

Canadian Journal of Public Health

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THE ASSOCIATION'S CONSULTANT ADVISORY SERVICE IS NOW ESTABLISHED



E. J. Young,
M.D., D.P.H.

WITH the appointment of Dr. E. J. Young, D.P.H., as Executive Director of the Association, the consultative service in public health administration is being inaugurated. Dr. Young possesses a thorough knowledge of public health and is familiar with public health problems in all the provinces. His many years of experience in public health in the armed services and the leadership which he has given as Deputy Director of the Division of Emergency Health Services in the Department of National Health and Welfare qualify him admirably for the responsibilities as the Association's senior administrative officer and for the administration of the consultative service program.

Consultative services provided by experts are recognized as being of prime importance in all fields of administration. This is particularly true in the field of public health. Consultative services are being provided by both the federal and provincial departments of health and constitute one of the major functions of these departments. Through the administrative officers of its various divisions, the Department of National Health and Welfare assists the provincial departments of health in their planning and through the National Health Grants assists them financially in the operating of certain programs. Each of the provincial departments of health, in turn, is concerned with the efficiency of the health services at the local level. The advice and assistance of the officers of the provincial departments are at the disposal of the medical officers of health and staffs of all local health departments. As well, the various national voluntary health agencies concerned with special health fields include in their contributions advisory services and assistance to local health agencies.

There has been in Canada, however, an unmet need for consultant services in public health administration. Official health departments recognize that problems arise from time to time which may best be met by studies conducted under a non-official authority by independent expert consultants. Examples of such needs come readily to mind. In one large city the medical officer of

health has recommended for several years, without success, the decentralizing of the health department services. The advantages of a reorganization of the health department will probably not be recognized by the municipal authorities until an independent study is made by a public health authority of recognized stature. Another example relates to a public health nursing service provided in a large city. Here there is an urgent need for the strengthening of this service and the recognition of the value of the services being rendered. More adequate salaries are essential if the nursing staff is to render efficient service. Without question the findings and recommendations of a consultant would be most helpful to the mayor and members of council. Again, school medical inspection services in one area are being currently reviewed in regard to their objectives and accomplishments. The recommendation of a recognized public health leader made after a careful study of local conditions and needs would be invaluable to the medical officer in replanning the school health program.

The Committee on Needs of the Association, appointed by the Executive Council, stated in its report at the Vancouver meeting that the Association should undertake the provision of such a consultative service at an early date and proceed with the appointment of an executive director as a full-time officer of the Association. This officer would develop this new service. His responsibilities would be to receive and study requests for consultative service. Following first hand study the executive director would decide if the request would afford the Association an opportunity to render a helpful service, and if so, to arrange for the conduct of the study or survey by the most suitable expert or experts. The expenses and suitable honoraria for those conducting the study would be met by the authority requesting the study.

This plan would be a truly co-operative undertaking. The provincial departments of health, recognizing the need for these services, have joined in assisting the Association financially. The Association, in turn, has undertaken to meet the balance of the financial obligations. The expert consultants will be chiefly retired Canadian leaders in the various fields of public health. It is expected also that senior members of university public health departments may be available during summer vacations. Further, it is hoped that to meet occasional special needs, official health agencies will permit senior members to participate.

The Canadian Public Health Association has rendered continuous service in the advancement of public health in Canada for fifty years. The Association is recognized as an authoritative body expressing the considered opinions of public health leaders throughout the Dominion. The introduction of a consultative service program constitutes an important new development not only in the Association's work but in the development of public health in Canada. It is a service which the Association is qualified to render. It will, however, require time for its development and the rendering of maximum service.

AN OCCUPATIONAL HEALTH SURVEY

L. W. ECKFORD,¹ C.S.I.(C)

During 1959 a survey was undertaken of health conditions in local industry with particular emphasis on environmental factors. Establishments having a group of ten or more workers were included in the survey and three hundred establishments were inspected. This was a good coverage of the area. The survey was conducted to provide information which would demonstrate the need for service in this field by the health department and, at the same time, to introduce the subject of occupational health to the management of many of the smaller establishments. The Workmen's Compensation Board is actively engaged in an accident prevention program and many individuals are covered by group plans for medical services and loss of pay insurance but it was felt that occupational health services should be made available to small businesses and industries through the public health department.

In assessing occupational hazards, an attempt was made to include both actual and potential hazards. The opinions of management and labour were obtained and it was noted that management and the workers sometimes disagreed upon what constitutes a hazard. Many of the hazards were common to several occupations. The industrial use of radioactive materials presented a potential, if not actual, occupational hazard. Air pollution problems existed to some degree, poor ventilation was noted and the hazard of carbon monoxide from motor vehicles. Safety programs were in operation in 118 or 39% of the establishments. These programs usually included a display of Workmen's Compensation Board posters and considerable interest was shown in

literature on various occupational health hazards. The need was expressed for Workmen's Compensation Board posters applicable to specific trades and it was suggested that classes in subjects pertaining to safety might be of value.

Management's interest in a full-scale program was evidenced by safety supervisors, the holding of safety meetings, competitions, etc. In some instances the management appeared to leave safety supervision to the labour union. In others, there was a combined labour-management program.

The number of workers employed in the plants varied greatly. One-third of the 300 plants surveyed employed 10 to 14 workers, half had groups of 10 to 50 workers, 9% had 50 to 99 workers, 6% had 100 to 499 workers and 1.7% had 500 to 999 workers. There was one plant with more than 1,000 workers.

There were 98 (32%) plants with occupational hazards or known nuisances and 23 plants (7%) with air pollution problems.

In 85 plants there was a part-time first aid attendant and in 5 plants a full-time first aid attendant. In two plants a full-time nurse was employed, in four plants a part-time physician and in none of the plants was a physician employed full-time.

Included in the survey were 37 business offices, 92 trade establishments, 60 providing services, 25 in construction work, 50 transportation and equipment and the remainder were engaged in various industrial operations.

It was felt that the survey was of value in introducing the subject of occupational health to management of small business and industry and in providing an opportunity to speak of public health services. It also introduced a new service in the public health program in this area.

¹Victoria-Esquimalt Health Department, 1947 Cook Street, Victoria, B.C.

The Canadian Public Health Association Annual Report

PART IV

1959-1960

REPORT OF THE COMMITTEE ON SOCIAL SECURITY

John S. Sparks, Secretary, Medical Care Section

AT THE LAST meeting of the Executive Council in Montreal, it was decided to recommend that the work of the Committee on Social Security should be delegated to the Medical Care Section since it was believed that the subject of social security was related to the general area of interest of members of this section. This matter was discussed at the business meeting of the Section on June 3, 1959 and the recommendation of the Executive Council was accepted by the members attending the meeting.

During the past year the secretary of the section has collected various resolutions and other documents bearing on the subject of social security and on a re-evaluation of the brief submitted by the Canadian Public Health Association to the Advisory Committee on Health Insurance of the Special Committee on Social Security, 1943. A committee of the section has been established to examine what particular aspects of social security might form the basis of a report to be placed before the membership of the section and the Executive Council at the 1961 annual meeting.

The Committee would appreciate receiving comments and suggestions from members of the Association with an interest in this subject.

REPORT OF THE COMMITTEE ON RECRUITMENT OF PUBLIC HEALTH PERSONNEL

Wm. Mosley, M.D., C.M., D.P.H., Chairman

A SURVEY by the Committee of the needs in the various provinces for qualified public health personnel did not indicate an urgent situation apart from the fields of health education and public health engineering. Appointments of new medical officers of health and medical officers serving in special fields have included many physicians whose training was in Great Britain or other countries of Europe.

It would appear that the needs are being met but it is a matter of concern that so few physicians are interested upon graduation in the field of administrative public health work. Studies being made in the United States regarding the interest of young physicians in public health work reveal a similar situation. The Committee believes that it is highly desirable to present the

opportunities of a career in public health to senior medical students at the time they receive their instruction in preventive medicine. The Committee believes that health officers should have had several years in general practice before entering public health work. Enquiry has shown that information given and interest created by the presentation of the subject during their undergraduate medical course was a factor in the subsequent decision of physicians to enter the field of health administration. For that reason the Committee will continue to furnish to the department of preventive medicine of the various medical colleges information relating to public health as a career. A new folder is being prepared.

The Executive Council last year requested the section officers to prepare pamphlets which might be used in interesting students in the various fields of public health. The Committee is indebted to Miss Isabel Black, chairman of the Section of Public Health Nursing, for establishing a subcommittee composed of Miss Muriel Lowry, Miss Mildred Walker, and Miss Elizabeth Reed. This subcommittee has submitted a draft of an attractive pamphlet to be made available for distribution to students in schools of nursing. It is felt that this group would be particularly interested in learning of public health nursing as a career. It is expected that several of the other sections will prepare literature and assist the Committee on Recruitment in presenting public health as a career.

The Committee is following with great interest the full-time study arranged by the committee of the American Public Health Association having as its purpose the determining of the factors which have influenced physicians to engage in public health as a career.

REPORT OF THE COMMITTEE ON PUBLIC HEALTH PRACTICE

Gordon E. Wride, M.D., D.P.H., Chairman

IT WILL BE RECALLED that, during the 1959 meeting of the Executive Council of the Canadian Public Health Association in Montreal, there was not expressed a unanimous opinion that the contemplated committee, which had been under discussion after the 1958 meeting in Vancouver, would in fact be needed, as there were other agencies and personnel undertaking studies, or prepared to undertake studies, in the suggested areas.

It was also recognized that there were in existence two committees of the Canadian Public Health Association dealing with remuneration and with recruitment of public health personnel. It was suggested that duplication should not occur between the committees, although a committee on public health generally would need access to the information compiled by other committees.

Subsequently, in the fall of 1959, instructions were received that the committee should deal at this time with public health practice, of which the terms of reference suggested the eventual preparation of a broad statement representing the ideal role of public health as well as the functions of health departments and of health officers.

Acting on these instructions a further meeting of the committee was held

during the spring meeting of the Dominion Council of Health in Ottawa, with general discussion of the problems involved and the useful role of the committee. Attention was given to certain developments in Canada and agreement was reached on the following matters:

- (1) The members of the committee were unanimous that a great challenge exists for a responsible group to act as a steering or co-ordinating committee, which could keep in touch and promote a series of studies, investigations and research in matters of public health in Canada and in other countries, and which might elicit and perhaps prepare pertinent articles from time to time for publication in the Canadian Journal of Public Health.
- (2) It was recognized that the functions of the committee would be necessarily long-term but that the need for haste should always be kept in mind, since one of the inherent drawbacks of prolonged research is that the results are often out of date and not applicable by the time they are brought to general knowledge.
- (3) Note was taken of the excellent articles which have appeared in the Canadian Journal of Public Health on the history, organization, and responsibilities of the provincial and federal departments of health, and it was proposed that the committee chairman prepare an article on the local health services developed and supported at the request of the provinces with assistance under the National Health Grants.
- (4) Dr. E. W. R. Best described for the committee the progress being made in the preparation of a survey of health unit services in Canada which will be under way in 1960 under the auspices of the School of Hygiene, with assistance from the Kellogg Foundation and with the active collaboration of the Divisions of Epidemiology and of Research and Statistics of the Department of National Health and Welfare. A full-time research position has been opened in the Division of Research and Statistics to work on this and similar studies.
- (5) The committee noted with appreciation the increases in federal assistance made in 1960 during the rearrangement of the National Health Grants, whereby the Professional Training Grant and the Public Health Research Grant are more than tripled, and the General Public Health Grant raised from the former 50 cents per capita to 80 cents per capita, which is recognized as corresponding roughly with one-third of the average cost, per capita, of operating a local health unit.
- (6) The committee agreed that the provinces and their local health agencies should be encouraged to undertake inspired studies and analyses, perhaps with assistance under the Grants, looking not only at the present form and practice of public health but seeking early knowledge which can lead our health workers closer to our mutual goal—"Better Health for the Canadian People".
- (7) The committee will meet regularly during the two annual meetings of the Dominion Council of Health and will, from time to time, invite others to join in planning and reporting on important health fields.
- (8) The committee will welcome any advice and suggestions which would aid it in discharging its functions.

REPORT OF THE LABORATORY SECTION

F. O. Wishart, M.D., D.P.H., Secretary

THE TWENTY-SEVENTH Annual Meeting of the Laboratory Section of the Canadian Public Health Association was held at the King Edward-Sheraton Hotel, Toronto, on December 7 and 8, 1959.

A registered attendance of 130, one of the largest on record, gives a measure of the interest in the meeting. The program extended over two full days and consisted of a presentation of 28 excellent papers on a wide range of important subjects.

A pleasant interlude in the form of a Social Hour was enjoyed by the members after the heavy program of the first day. The annual luncheon was held on the same day with 90 persons in attendance. The speaker for the occasion was Brigadier Claude E. Dewhurst, O.B.E., who gave a memorable, penetrating, and entertaining address entitled "Soviet Capers", an account of his experiences of, and reflections on, Soviet policy in Occupied Europe.

The business session received a report from Dr. G. W. O. Moss, Honorary Secretary, Canadian Public Health Association, to the effect that the parent body looked with favour on a close liaison between the Epidemiology and the Laboratory Sections, especially with relation to program arrangements for the annual meetings. Association of the Epidemiology with the Laboratory Section was warmly approved by the membership. Co-operation in the formulation of a program for the Halifax meeting in 1960 was endorsed and Dr. C. E. van Rooyen agreed to act as local representative of the Section.

The Nominations Committee proposed the following officers for the ensuing year.

Executive Past Chairman	—	Dr. N. Hinton, Kingston
Chairman	—	Dr. Sorin Sonea, Montreal
Vice-Chairman	—	Dr. E. T. Bynoe, Ottawa
Secretary	—	Dr. F. O. Wishart, Toronto

Council—Dr. E. J. Bowmer, Vancouver
Dr. G. Dempster, Saskatoon
Dr. J. M. Desranleau, Montreal
Dr. R. Reed, Montreal
Dr. A. J. Rhodes, Toronto

These nominations were approved unanimously.

An Executive and Council meeting was held on December 8 at which general policy and plans for the ensuing year were discussed. It was agreed that the 1960 meeting should be held in Ottawa, December 1 and 2.

REPORT OF THE VITAL AND HEALTH STATISTICS SECTION

H. G. Page, M.A., M.P.H., Secretary

IN ACCORDANCE with the decision taken by the Section Council at the Vancouver meeting (1958) the 1959 meeting of the Section was held in conjunction with the Association Convention in Montreal, June 1-3.

While the Association was celebrating the fiftieth anniversary of its founding the section also celebrated the thirtieth anniversary of its founding as a separate section of the Association and an appropriate program was arranged for the occasion.

Two sessions were held at the Montreal meeting, one a separate session and one a joint meeting with the Medical Care Section. The section also sponsored an Association luncheon featuring an inspiring address by Dr. Halbert L. Dunn, Chief of the National Office of Vital Statistics, Washington, on "High Level Wellness" or the concept of positive health.

As the result of a provocative paper by Dr. Paul Parrot (Quebec), one of the founders of the section who reviewed the highlights of its history, the members took advantage of the occasion to review critically the status of the section, to suggest future activity, and to formulate future policy. Following are some of the problems discussed and decisions arising out of the meeting:

(1) *The changing emphasis in health problems*: The section, particularly in its early days, contributed greatly to the solution of many basic problems in the field of vital and health statistics. Notable among these are:

- (a) Allocation and tabulation of vital statistics by place of residence;
- (b) Definition and registration of stillbirths;
- (c) Classification of causes of stillbirth;
- (d) Certification and classification of causes of death and contributions over the years to the International Classification of Causes of Death and Diseases;
- (e) Uniformity of vital statistics records, including a standard medical certificate of cause of death;
- (f) The classification and use of racial origin statistics.

(2) *The scope of future section activity*: The following suggestions were made for reactivation of section activities.

- (a) That increased emphasis be given to the study of *morbidity* statistics, particularly the correlation of information from hospital, medical and school records;
- (b) that the Section sponsor and propagate new *methodology* in health statistics;
- (c) that section committees be critically re-examined and new committees formed and take an active part in advising and assisting the official national health agencies on current health problems; such committees should work closely and actively with other C.P.H.A. committees.
- (d) that the section executive explore the field for health statistics studies in progress—of which there must be many—and that these form the subject of section programs;
- (e) that the name of the section be changed;
- (f) that the section meet, as a general rule, in joint sessions with other sections as a means of assisting them in the statistical aspects of their programs.

(3) *Membership*: It was recommended that a directory of persons working in the field of health statistics throughout the country be prepared, and a campaign undertaken to solicit new membership.

(4) *Committee to review section problems*: the recommendation that a committee study the outstanding problems of the section was referred to the section executive.

One resolution was adopted at the Montreal meeting, that a recommendation for honorary life membership be conferred on Dr. R. H. Coats, retired Dominion Statistician and the first chairman of the section, be referred to the C.P.H.A. Committee on Life Membership. (Dr. Coats passed away shortly after the 1959 convention).

REPORT OF THE COMMITTEE ON ACCIDENT PREVENTION

Milton Brown, O.B.E., M.D., B.Sc., D.P.H., F.C.C.P., Chairman

A. C. McKenzie, B.A., M.P.H., Secretary

THE MEMBERSHIP of the committee is as follows: Milton Brown, Ant. B. Valois (Vice-chairman), Jean Webb, R. B. Sutherland, D. Kubryk, Christian Smith, A. C. McKenzie (Secretary).

It has not been possible to convene a meeting of the committee as a whole but some progress has been made by correspondence. The following terms of reference have been suggested:

1. To study the framework of communication between itself and the Canadian Public Health Association's provincial branches, and the local, provincial and federal health departments.

2. To act in a guiding, stimulating, co-ordinating advisory and liaison capacity between these groups in matters of specific progress of accident prevention.

3. To decide what areas of accident prevention might logically be its concern and whether or not it should allot priorities of study.

It has been proposed that some members of the Committee collate proposals on specific fields in accident prevention: Dr. Webb on home accidents, Dr. Sutherland on accidents in industry, Dr. Kubryk on traffic accidents and Mr. Christian Smith on the educational aspects.

It is hoped local committees will be set up under these individuals to study the problem and make recommendations to the committee as a whole.

News Notes

International

The Canadian Red Cross Society sent medical aid to the Congo consisting of two medical and nursing teams in response to a request by the Secretary General of the United Nations. Both teams have been sent to the northern sector of the Congo. Each team is composed of a surgeon, a physician, and three nurses. The surgeons were Dr. John A. Davidson, Ormstown, Quebec, and Dr. Roger Paulin, Montreal, and the physicians were Dr. I. A. Edwards, Dorian, Quebec and Dr. J. C. Sinclair, Toronto, Ontario. The nurses were Miss Denise Beaulieu and Miss Terese Charron, Ste. Foy, Quebec, Miss Aline Galarneau and Miss Jacqueline Mayrand, Montreal, Mrs. Johanna Korlu, Toronto and Miss Marguerite Petruault, Ste. Anne de Bellevue, Quebec.

The Canadian Government sent two field hospitals, drugs, wheat, flour, and pork as well as a cash grant and 14 tons of drugs, new clothing and health kits from the Canadian Red Cross Society.

Federal

Dr. C. A. Morrell, head of the Food and Drug Directorate in the Department of

National Health and Welfare, was a speaker at the centenary of the British Pure Food Law celebrated in London, England, September 19-24. Dr. Morrell traced the development of the Food and Drug Act in Canada since its inception in 1874. This legislation represented the first general law of its kind at a national level.

Prince Edward Island

Nearly 40,000 children have received the required poliomyelitis inoculations under the provincial immunization program conducted for the past three months by the department of health. More than 1,000 clinics were held in more than 425 schools in the province, including final regional clinics in 85 centers. Nearly 50,000 inoculations were given by local physicians. This year a fourth inoculation against polio was instituted.

Ontario

Health Minister Dymond has announced that a Division of Rehabilitation has been formed in the department and that Mr. Kenneth L. Hawkins, formerly Director of Health Information Services, has been appointed as director. Mr. Hawkins, prior to

entering the public relations field, was associated with the rehabilitation section of the Division of Tuberculosis Prevention. Regional offices have been established at Fort William, North Bay, Hamilton, Kingston, and London. Central Ontario will be under the head office in Toronto.

Dr. H. J. Lambert, D.P.H., medical officer of health, London, Ontario, has resigned to engage in postgraduate studies in epidemiology at Ann Arbor, Michigan.

Manitoba

Dr. Wilson King, formerly of Cornerbrook, Newfoundland, has been recently appointed to the Bureau of Dental Services. Dr. Bernard Hink and Dr. Walter Randall, both graduates of the University of Toronto, have also been appointed to the Bureau.

In anticipation of the many architectural problems which could arise in planning for elderly persons housing, a Winnipeg architect, Jack Donner, has been commissioned by the Provincial Government, to work with the Director of Alternative Care, to develop a series of plans outlining self-contained housing units and hostels which are supported by construction grants under the Elderly Persons Housing Act.

Saskatchewan

At its annual convention in Saskatoon, the Junior Chamber of Commerce of Canada decided unanimously to sponsor Child Safety Day (first Sunday in May) from coast to coast in 1961. This followed pilot programs in Saskatoon and throughout Saskatchewan in the past three years. The national Jaycees have been directed to local and provincial health authorities for information and statistics regarding fatal and non-fatal accidents to children under 15 years of age.

Twelve Saskatchewan urban communities now adjust the fluoride content of municipal water supplies for prevention of dental decay and a thirteenth has made provision for doing so when its new water and sewerage system goes into operation this autumn.

The Western Canada Water and Sewage Conference was held in Regina, September 21-23. About 400 delegates attended the technical sessions. Water treatment supervisors spent one day observing the water treatment plant at Buffalo Pound Lake.

Dr. L. Z. Cosin, clinical director of the Oxford Geriatric Unit, Oxford, England, is in Saskatchewan for three months. He came at the invitation of the Department of Public Health to study and advise on problems of geriatrics and of the chronically disabled.

Dr. E. R. Simpson has been appointed as medical health officer in charge of the Rose-town-Biggar-Kindersley Health Region. He was born in Johannesburg, Union of South Africa and graduated in medicine from the University in 1946, returning there in 1958 to receive the diploma in public health. Dr. Simpson formerly served in the British Colonial Medical Service.

Dr. P. K. B. White, M.R.C.S., L.R.C.P., of London, England has joined the staff of the Regina Physical Restoration Centre, Department of Public Health, as a specialist in physical medicine. Dr. White graduated from the University of London in 1951 and has specialized in physical medicine.

Alberta

Dr. Leslie C. Allan, Assistant Medical Officer of Health for the City of Calgary since 1949, became Medical Officer of Health following the retirement of Dr. W. H. Hill. Dr. Allan is a graduate of the University of Aberdeen, and obtained his D.P.H. from the University of Liverpool.

Dr. John C. Gillespie, a graduate of the University of Glasgow, has been appointed as Assistant Medical Officer of Health for the City of Edmonton. He was formerly Medical Officer of Health of the Stony Plain-Lac Ste. Anne Health Unit. Appointed to succeed Dr. Gillespie in the Stony Plain-Lac Ste. Anne Health Unit is Dr. A. J. Leslie-Spinks, a graduate of the University of Oxford. During the past year Dr. Leslie-Spinks has graciously filled a series of temporary positions with the Chinook, Barons-Eureka and Forest Lawn Health Units.

Dr. Elizabeth Hill has been granted leave of absence by the Board of the Jasper Place Health Unit to take the D.P.H. course at the University of Toronto.

British Columbia

The semi-annual health officers council met at Victoria on September 7, 8, and 9, under the chairmanship of the Provincial Health Officer, Dr. G. F. Amyot. Among the subjects discussed were tuberculosis surveys, the rheumatic fever prophylaxis program, home nursing care, poliomyelitis, emergency health services and radiation protection. Dr. A. E. Davidson, deputy minister of Mental Health Services, spoke on community mental health.

For the second year in succession, the outstanding display at Vancouver's annual Pacific National Exhibition was the "Safeguarding Motherhood" exhibit. Basically the same as last year, the purpose of the exhibit

was to present to the public factual information on pre-natal and post-natal care and development. On each day of the Exhibition, members of the medical and nursing professions were on hand to explain any questions not answered in any of the several panels composing the display. This year there were a number of improvements and some additions, and a heightening of the overall cohesiveness of the story-telling features.

The Metropolitan Health Committee of Greater Vancouver has announced the

appointment of Mr. Andrew Mikita as psychologist on the staff of the North Shore Health Unit. Mr. Mikita took his B.A. at the University of Western Ontario, followed by a master's degree in psychology at the University of Cincinnati, and further post-graduate studies at the University of Chicago.

The appointment has been announced of Dr. A. S. Arneil of Halifax as director of the Selkirk Health Unit at Nelson. Dr. Arneil succeeds Dr. J. M. O'Keefe who has resigned.

APPOINTMENT OF DR. G. L. DUMONT AS MINISTER OF HEALTH AND SOCIAL SERVICES, NEW BRUNSWICK



Dr. Georges L. Dumont has been appointed Minister of Health and Social Services of New Brunswick and Acting Chairman of the Hospital Services Commission. Dr. Dumont was born in Rogersville, N.B., received the degree of B.A. from St. Ann's University in 1920 and the degree of M.D. at Laval University in 1925. He practised in Campbelltown and later specialized in general surgery. He is president of the New Brunswick Medical Council and has been an active member of the New Brunswick Medical Society. He received an honorary doctorate in social sciences from Sacred Heart University in 1949, from St. Ann's University in 1952, and from Laval University in 1955. Dr. Dumont brings to the Cabinet a wide knowledge of medical and public health services.

LABORATORY SECTION

Canadian Public Health Association

TWENTY-EIGHTH ANNUAL CHRISTMAS MEETING

December 1 and 2, 1960

Chateau Laurier Hotel, Ottawa

Books and Reports

WORLD MEDICAL RESEARCH, PRINCIPLES AND PRACTICES.

Harry Sutherland Gear, M.D., D.P.H., D.T.M. and H., B.Sc., F.S.S. Butterworth & Co. (Canada) Ltd., Toronto, 1959, 117 pp., \$6.00.

The author, Deputy Chief Health Officer, Union of South Africa, has taken a leading part in W.H.O., serving as a member of World Health Assemblies, as Chairman of the Executive Board and as Assistant Director General. He has had special opportunities to study medical research throughout the world. This is the first book to be devoted to the international aspects of medical research. Its comprehensive approach embraces the constitutional background, health services, education, medical and scientific research, the work of the various international organizations, the difficulties of economic and social adjustment and questions of administration both now and in the future. Dr. Gear has rendered valuable service in outlining W.H.O. research principles and policies and in presenting briefly research in other international organizations including F.A.O. and UNESCO, and providing a background of understanding of the international concern and support of world medical research.

TUBERCULOSIS MEDICAL RESEARCH, National Tuberculosis

Association, 1904-1955, Historical Series No. 9, Virginia Cameron and Esmond R. Long, M.D., National Tuberculosis Association, New York, N.Y. 1959. 325 pp., \$5.00.

The story includes a running account of the development of the Association's program with a brief summary of the individual investigations supported, and a review of the administrative and financial aspects of the operation. The authors point out that the important feature is not the size of the program, but the precedents set for other voluntary bodies dedicated to the eradication of human ills. Medical research has now been accepted as a proper function of a voluntary body.

COMMUNICABLE AND INFECTIOUS DISEASES.

Franklin H. Top, M.D., M.P.H., F.A.C.P., F.A.A.P., F.A.P.-H.A. The C. V. Mosby Co., St. Louis, Mo. 1960, 812 pp., \$20.00.

In the preface to the first edition (1941) the author stated that the book was intended as a text for all persons whose professional duties necessitated contact with certain communicable diseases or infestations. This objective has been kept in mind in the fourth edition and the material has been presented as concisely as possible. The following new chapters have been added: Acute Respiratory Infections, including adenoviruses and the common cold; Enteroviruses, Coxsackie and ECHO Virus Infections, and Staphylococcal Infections. A number of chapters have been completely rewritten. Dr. Top, with the assistance of twenty collaborators, has made this fourth edition an outstanding text in this field. There are 122 figures and 15 excellent colour plates. Chapters completely rewritten by new authors are Chemotherapeutic and Antibiotic Agents, Management of Communicable Diseases in the Hospital, Management of Communicable Diseases in the Home, the Bacterial Pneumonias, Influenza, Infantile Diarrhea Due to Enteropathogenic *Escherichia coli*. Each chapter is followed by a comprehensive list of references. The volume is a convenient size and the printing is of the highest standard. This edition will maintain this work as one of the leading texts in this field.

BEHAVIORAL CHANGE IN THE CLINIC - A SYSTEMATIC APPROACH,

Gerald R. Pascal, Ph.D., Grune & Stratton, Inc., New York, N.Y. 1959, 128 pp., \$4.75.

This present work is an attempt to apply scientific method to the problem of changing gross human behaviour. The approach follows Watson who stated that the goal of behaviourism is to observe human behaviour systematically so that given the stimulus the response can be predicted, or, given the response, one can state the evoking stimulus.

